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EXAMINER

CAO, PHUONG THAO

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/729,883	Applicant(s) WAKEFIELD ET AL.	
	Examiner Phuong-Thao Cao	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 and 25-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 25-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/8/04 and 1/7/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to Application filed on 12/05/2003.
2. Claim 24 is missing. Currently, claims 1-23 and 25-48 are pending.

Information Disclosure Statement

3. The Information Disclosure Statements (IDS) filed by Applicant on 03/08/2004 and 01/07/2005 have been received and considered. Copies of the reviewed IDS(s) are enclosed with this office action.

Double Patenting

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The

filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claims 34-48 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 33-47 of copending Application No. 10/728,721. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-23 and 25-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/728,721. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-32 of the copending application teach all the limitations of claims 1-23 and 25-33 of the instant application wherein rendering at least one visual representation of the integrated data represents one of methods of data mining the integrated data.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claim 34-48 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/729,889. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-32 of the copending application teach all the limitations of claims 34-48 of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

9. Claims 7, 23 and 40 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 5, 21 and 38, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 1-4, 11-20, 28-37 and 44-48 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1-4, 11-20, 28-37 and 44-48, these claims recite the process of integrating mixed format data, but fails to recite a tangible result, a requirement for compliance with the provisions of 35 U.S.C. § 101 in view of the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, published on 26 October 2005, which can be found at

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf,

particularly with respect to ANNEX IV Computer-Related Nonstatutory Subject Matter, beginning on page 50.

For a result to be tangible, it must be more than just a thought or a computation; it must have real-world value rather than an abstract result. For instance, note that the limitations of claims 5-10, 21-23, 25-27 and 38-43 are not rejected, since they recite the function of producing a new database containing the integrated data produced by said integrating, whereas (for instance), independent claims 1, 17 and 34 merely cite 'integrating the produced data with the data tuples of the structured data' or 'data mining integrated data' as the result.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 42 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 42 recites the limitation "new database" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is believed that claim 42 may depend on claim 41 instead of claim 34 and treated as such in this office action. However, appropriate correction is required.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1,2, 4, 6, 11-18, 20, 22, 28-35, 37, 39 and 44-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Haug et al. (US Patent No 6,292,771).

As to claim 1, Haug et al. teach:

“A computer program product located to one or more storage media devices usable to perform integration of mixed format data” (see Abstract and [column 5, lines 5-20]), said computer program product comprising instructions executable by a computer to perform the functions of:

“accessing a database of structured data, the structured data comprising a set of data tuples” (see [column 5, lines 10-20 and 33-36] wherein data in a table such as the type of patient and the type of physician are equivalent to Applicant’s “structured language” and rows in a table represent a set of data tuples as illustrated in Applicant’s claim language);

“accessing a source of unstructured data, the unstructured data including free text relatable to the data tuples of the structured data” (see [column 5, lines 5-20 and 20-30] wherein a column in the table as disclosed in which a free-text description of the reason for admission for each specific patient is stored is equivalent to Applicant’s “source of unstructured data” and the

disclosure of obtaining free-text information must include accessing its source as illustrated in Applicant's claim language);

“extracting relational facts from the free text” (see [column 5, lines 25-35] wherein discrete concepts are equivalent to Applicant’s “relational facts”);

“producing a set of construed data reflecting at least one relational fact conveyed in the free text, each construed datum relatable to a data tuple of the structured data” (see [column 5, lines 20-35 and 40-67], [column 6, lines 1-10], [column 8, lines 55-60] and Fig. 5 wherein the interpretive ICD9 codes is equivalent to Applicant's “a set of construed data”, and each interpretive ICD9 code related to the patient record (equivalent to a data tuple of the structured data) through a patient id [column 6, lines 1-3]);

“integrating the produced data with the data tuples of the structured data” (see [column 6, lines 1-10] wherein interpretive ICD9 code is equivalent to Applicant’s “produced data”, patient record is equivalent to Applicant's “data tuples of the structured data”, and the disclosure of writing the patient id and interpretive ICD9 code to the patient record is equivalent the integrating as illustrated in Applicant's claim language); and

“data mining the integrated data” (see [column 1, lines 20-40] and [column 5, lines 30-35] wherein the disclosure of data in coded form used in research, decision support, quality assurance and analysis is equivalent to data mining as illustrated in Applicant's claim language).

As to claim 2, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said accessing a source of unstructured data accesses unstructured textual data contained within the database of structured data” (see [column 5, lines 5-20] discloses that free-text description of the reason for admission (unstructured data) is stored in the same table in a local database as other patient information such as the type of patient, patient id and the type of physician (structured data)).

As to claim 4, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instructions are further executable to perform the function of applying caseframes while performing said interpreting the free text” (see [column 5, lines 40-65] and Fig. 5 wherein a syntactic parsetree as disclosed is equivalent to Applicant’s “caseframes”; also see [column 7, lines 20-30] wherein proposed syntactic relations is equivalent to Applicant’s “caseframes”).

As to claim 6, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instructions are further executable to perform the function of inserting the produced data into the database of structured data while performing said integrating the produced data” (see [column 6, lines 1-15] wherein the interpretive ICD9 code is equivalent to Applicant’s “produced data”, patient record is equivalent to Applicant’s “structured data”, and the disclosure

of writing the patient id and interpretive ICD9 record to the patient record on the HELP system implies the inserting the produced data as illustrated in Applicant's claim language).

As to claim 11, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“a processing unit coupled to said one or more storage media devices, said processing unit being capable of executing said instructions” (see [column 4, lines 40-60] wherein computer 100 or computer system 104 is equivalent to Applicant's “processing unit”); and

“an execution command unit, whereby operation of said instructions and said processing unit may be commanded or controlled” (see [column 4, lines 40-65] wherein computer inherently includes an execution command unit as illustrated in Applicant's claim language).

As to claim 12, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instructions are further executable to combine like attributes for the extracted relational facts produced in performing said extracting relational facts from the free text” (see [column 7, lines 55-67] and [column 8, lines 5-20] wherein concepts is equivalent to Applicant's “extracted relational facts”, words or phases is equivalent to Applicant's “attributes”, and the disclosure of finding the optimal matching of words or phases implies the combining like attributes as illustrated in Applicant's claim language).

As to claim 13, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instructions are further executable to combine like relation types for the extracted facts produced in performing said extracting relational facts from the free text” (see [column 7, lines 20-55] wherein “proposed syntactic relations” is equivalent to Applicant’s “relation types for the extracted facts” and the disclosure of applying ongoing analysis of semantic analysis of the proposed syntactic relations in transforming and parsing the text implies the combining appropriate or like relation types as illustrated in Applicant’s claim language in order to extract and produce the appropriate concepts as disclosed; also see [column 8, lines 35-56]).

As to claim 14, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instruction provide relational facts with domain roles applied in performing said extracting relational facts from the free text” (see [column 8, lines 1-65] and Fig. 5 wherein each node in the parsetree represents a domain role as illustrated in Applicant’s claim language, word or phrase parsed from the free text associated with nodes in parsetree during the process of producing the admission diagnosis code is equivalent to Applicant’s “relational facts”).

As to claim 15, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instruction store the relational facts produced in performing said extracting relational facts from the free text” (see [column 5, lines 27-33] wherein discrete concept information is equivalent to Applicant’s “relational facts”).

As to claim 16, this claim is rejected based on arguments given above for rejected claim 1 and is similarly rejected including the following:

Haug et al. teach:

“wherein the extracted relational facts produced in performing said extracting relational facts and the integrated data produced by the performance of said integrating the produced data includes reference information to the original free text” (see [column 6, lines 1-10] wherein the ICD9 code is equivalent to Applicant’s “extracted relational facts” and the disclosure of getting a list of patient admissions from the preceding day along with the free-text and the ICD9 code implies there must include some reference information to the original free text as illustrated in Applicant’s claim language to be able to get the original free-text and the corresponding ICD9 code together as disclosed).

As to claim 17, Haug et al. teach:

“A computer program product located to one or more storage media devices usable to perform integration of mixed format data” (see Abstract and [column 5, lines 5-20]), said computer program product comprising instructions executable by a computer to perform the functions of:

“accessing a database of structured data, the structured data comprising a set of data tuples” (see [column 5, lines 10-20 and 33-36] wherein data in a table such as the type of patient and the type of physician are equivalent to Applicant’s “structured language” and rows in a table represent a set of data tuples as illustrated in Applicant’s claim language);

“accessing a source of unstructured data, the unstructured data including free text relatable to the data tuples of the structured data” (see [column 5, lines 5-20 and 20-30] wherein a column in the table as disclosed in which a free-text description of the reason for admission for each specific patient is stored is equivalent to Applicant’s “source of unstructured data” and the disclosure of obtaining free-text information must include accessing its source as illustrated in Applicant’s claim language);

“extracting relational facts from the free text” (see [column 5, lines 25-35] wherein discrete concepts are equivalent to Applicant’s “relational facts”);

“producing a set of construed data reflecting at least one relational fact conveyed in the free text, each construed datum relatable to a data tuple of the structured data” (see [column 5, lines 20-35 and 40-67] and [column 6, lines 1-10] wherein the interpretive ICD9 code is equivalent to Applicant’s “construed data”, and each interpretive ICD9 code related to the patient record (equivalent to a data tuple of structured data) through a patient id [column 6, lines 1-3]);

“integrating the produced data with the data tuples of the structured data” (see [column 6, lines 1-10] wherein interpretive ICD9 code is equivalent to Applicant’s “produced data”, patient

record is equivalent to Applicant's "data tuples of the structured data", and the disclosure of writing the patient id and interpretive ICD9 code to the patient record is equivalent the integrating as illustrated in Applicant's claim language); and

"data mining the integrated data" (see [column 1, lines 20-40] and [column 5, lines 30-35] wherein the disclosure of data in coded form used in research, decision support, quality assurance and analysis is equivalent to data mining as illustrated in Applicant's claim language).

As to claim 18, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

"wherein said accessing a source of unstructured data accesses unstructured textual data contained within the database of structured data" (see [column 5, lines 5-20] discloses that free-text description of the reason for admission (unstructured data) is stored in the same table in a local database as other patient information such as the type of patient, patient id and the type of physician (structured data)).

As to claim 20, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

"wherein said performing said interpreting the free text applies caseframes while performing said interpreting the free text" (see [column 5, lines 40-65] wherein a syntactic

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parsetree as disclosed is equivalent to Applicant's "caseframes"; also see [column 7, lines 20-30] wherein proposed syntactic relations is equivalent to Applicant's "caseframes").

As to claim 22, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

"further comprising the step of inserting the produced data into the database of structured data while performing said integrating the produced data" (see [column 6, lines 1-15] wherein the interpretive ICD9 code is equivalent to Applicant's "produced data", patient record is equivalent to Applicant's "structured data", and the disclosure of writing the patient id and interpretive ICD9 record to the patient record on the HELP system implies the inserting the produced data as illustrated in Applicant's claim language).

As to claim 28, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

"a processing unit coupled to said one or more storage media devices, said processing unit being capable of executing said instructions" (see [column 4, lines 40-60] wherein computer 100 or computer system 104 is equivalent to Applicant's "processing unit"); and

"an execution command unit, whereby operation of said instructions and said processing unit may be commanded or controlled" (see [column 4, lines 40-65] wherein computer inherently includes an execution command unit as illustrated in Applicant's claim language).

As to claim 29, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instructions are further executable to combine like attributes for the extracted relational facts produced in performing said extracting relational facts from the free text” (see [column 7, lines 55-67] and [column 8, lines 5-20] wherein concepts is equivalent to Applicant’s “extracted relational facts”, words or phases is equivalent to Applicant’s “attributes”, and the disclosure of finding the optimal matching of words or phases implies the combining like attributes as illustrated in Applicant’s claim language).

As to claim 30, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instructions are further executable to combine like relations for the extracted facts produced in performing said extracting relational facts from the free text” (see [column 7, lines 20-55] wherein “proposed syntactic relations” is equivalent to Applicant’s “relations for the extracted facts” and the disclosure of applying ongoing analysis of semantic analysis of the proposed syntactic relations in transforming and parsing the text implies the combining appropriate or like relation types as illustrated in Applicant’s claim language in order to extract and produce the appropriate concepts as disclosed; also see [column 8, lines 35-56]).

As to claim 31, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instruction provide relational facts with domain roles applied in performing said extracting relational facts from the free text” (see [column 8, lines 1-65] and Fig. 5 wherein each node in the parsetree represents a domain role as illustrated in Applicant’s claim language, word or phrase parsed from the free text associated with nodes in parsetree during the process of producing the admission diagnosis code is equivalent to Applicant’s “relational facts”).

As to claim 32, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

“wherein said instruction store the relational facts produced in performing said extracting relational facts from the free text” (see [column 5, lines 27-33] wherein discrete concept information is equivalent to Applicant’s “relational facts”).

As to claim 33, this claim is rejected based on arguments given above for rejected claim 17 and is similarly rejected including the following:

Haug et al. teach:

“wherein the extracted relational facts produced in performing said extracting relational facts and the integrated data produced by the performance of said integrating the produced data includes reference information to the original free text” (see [column 6, lines 1-10] wherein the

ICD9 code is equivalent to Applicant's "extracted relational facts" and the disclosure of getting a list of patient admissions from the preceding day along with the free-text and the ICD9 code implies there must include some reference information to the original free text as illustrated in Applicant's claim language to be able to get the original free-text and the corresponding ICD9 code together as disclosed).

As to claim 34, Haug et al. teach:

"A method for integrating mixed format data" (see Abstract and [column 5, lines 5-20]), said computer program product comprising instructions executable by a computer to perform the functions of:

"accessing a database of structured data, the structured data comprising a set of data tuples" (see [column 5, lines 10-20 and 33-36] wherein data in a table such as the type of patient and the type of physician are equivalent to Applicant's "structured language" and rows in a table represent a set of data tuples as illustrated in Applicant's claim language);

"accessing a source of unstructured data, the unstructured data including free text relatable to the data tuples of the structured data" (see [column 5, lines 5-20 and 20-30] wherein a column in the table as disclosed in which a free-text description of the reason for admission for each specific patient is stored is equivalent to Applicant's "source of unstructured data" and the disclosure of obtaining free-text information must include accessing its source as illustrated in Applicant's claim language);

"producing a set of construed data reflecting at least one relational fact conveyed in the free text, each construed datum relatable to a data tuple of the structured data" (see [column 5,

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lines 20-35 and 40-67] and [column 6, lines 1-10] wherein the interpretive ICD9 code is equivalent to Applicant's "construed data", and each interpretive ICD9 code related to the patient record through a patient id [column 6, lines 1-3]); and

"integrating the produced data with the data tuples of the structured data" (see [column 6, lines 1-10] wherein interpretive ICD9 code is equivalent to Applicant's "produced data", patient record is equivalent to Applicant's "data tuples of the structured data", and the disclosure of writing the patient id and interpretive ICD9 code to the patient record is equivalent the integrating as illustrated in Applicant's claim language).

As to claims 35, 37, 39, and 44-48, these claim is rejected based on arguments given above for rejected independent claim 34 and dependent claims 2, 4, 6, and 12-16 respectively, and are similarly rejected.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 3, 19 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haug et al. (US Patent No 6,292,771) as applied to claims 1, 17 and 34 above, and further in view of Chen et al. (Publication No US 2003/0149586).

As to claims 3, 19 and 36, these claims are rejected based on arguments given above for rejected claims 1, 17 and 34 respectively, and are similarly rejected including the following:

Haug et al. do not teach “wherein said accessing a source of unstructured data and said accessing a database of structured data access two separate data source”.

Chen et al. teach “wherein said accessing a source of unstructured data and said accessing a database of structured data access two separate data sources” (see [0049] and [0154] for the disclosure of deriving information from more than one information source; also see [0141] and [0142]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Haug et al. by the teaching of Chen et al., since accessing unstructured data and accessing structured data from different sources provides an efficient way to combine information from different systems comprised in a complex operational environment for tracking and analyzing activities (see Chen et al., [0141] and [0142]).

18. Claims 5, 7-8, 21, 23, 25, 38, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haug et al. (US Patent No 6,292,771) as applied to claims 1, 17 and 34 above, and further in view of Smith et al. (US Patent No 6,052,693).

As to claims 5, 21 and 38, these claims are rejected based on arguments given above for rejected claims 1 and 14, and are similarly rejected including the following:

Haug et al. do not teach “producing a new database containing the integrated data produced by said integrating”.

Smith et al. teach “producing a new database containing the integrated data produced by said integrating” (see Abstract, [column 2, lines 62-67], [column 3, lines 65-67], [column 4, lines 1-25], and [column 16, lines 10-40]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Haug et al. by the teaching of Smith et al., since producing a new database containing the integrated data provides an additional and effective way to store and manipulate the data without changing the database schema of the present database system.

As to claims 7, 23 and 40, these claims are rejected based on arguments given above for rejected claims 1, 17 and 34, and are similarly rejected including the following:

Haug et al. do not teach “creating a new database while performing said integrating the produced data”.

Smith et al. teach “creating a new database while performing said integrating the produced data” (see Abstract, [column 2, lines 62-67], [column 3, lines 65-67], [column 4, lines 1-25], and [column 16, lines 10-40]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Haug et al. by the teaching of Smith et al., since creating a new database while performing said integrating the produced data provides an additional and

effective way to store and manipulate the data without changing the database schema of the present database system.

As to claims 8, 25 and 41, these claims are rejected based on arguments given above for rejected claims 7, 23 and 40, and are similarly rejected including the following:

Haug et al. as modified teach “to produce a new relational database containing the integrated data produced by said integrating” (see Haug et al., [column 5, lines 5-20] wherein the disclosure of table in a local database implies relational database, and Smith et al., Abstract).

19. Claims 9-10, 26-27 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haug et al. (US Patent No 6,292,771) in view of Smith et al. (US Patent No 6,052,693) as applied to claims 8, 25 and 41 above, and further in view of Chen et al. (Publication No US 2003/0149586).

As to claims 9, 26 and 42, these claims are rejected based on arguments given above for rejected claims 8, 25 and 41, and are similarly rejected including the following:

Haug et al. as modified does not teach “produce a file containing the integrated data produced by said integrating” (claims 9 and 26) and “wherein new database includes at least one file containing the integrated data produced by said integrating” (claim 42).

Chen et al. teach “produce a file containing the integrated data produced by said integrating” and “wherein new database includes at least one file containing the integrated data

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produced by said integrating” (see [0008], [0050], [0146] and [0149] wherein template is a file or database containing the integrated data as illustrated in Applicant’s claim language).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Haug et al. as modified by the teaching of Chen et al., since producing or including a file containing the integrated data provide an effective way to communicate data from one system to another system (see Chen et al., [0146]).

As to claims 10, 27 and 43, these claims are rejected based on arguments given above for rejected claims 9, 26 and 42 respectively, and are similarly rejected including the following:

Haug et al. as modified does not teach “produce a file having a format selected from the group of XML (or XML file), character separated values, spreadsheet formats and file-based database structures” (claim 10) and “wherein the new database has a format selected from the group of XML, character separated values, spreadsheet formats and file-based database structures” (claim 23).

Chen et al. teach “produce a file having a format selected from the group of XML (or XML file), character separated values, spreadsheet formats and file-based database structures” and “wherein the new database has a format selected from the group of XML, character separated values, spreadsheet formats and file-based database structure” (see [0049], [0146]-[0149] wherein template file is equivalent to Applicant’s “file” and “new database”).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Haug et al. as modified by the teaching of Chen et al., since adding the feature of new database or file having a format selected from the group of XML,

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character separated values, spreadsheet formats and file-based database structure provides the system with effective and flexible choices for storing, manipulating and communicating the data.

20. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

Saldanha et al. (Publication No US 2003/0167266) teach a method and system for converting plain text into structured data.

Alpha et al. (US Patent No 6,980,976) teach a method and system to built an combined index of the structured and unstructured data columns.

Saffer et al. (US Patent No 6,718,336) teach a data import system enabling access to data of multiple types from multiple data sources of different format and providing an interface for importing data into a data analysis system. The processing of a data set may including merging a first and second data set to produce the final data representation and transforming a text string to a series of attributes.

Mohan et al. (US Patent No 6,970,881) teach a method and system for analyzing and categorizing unstructured data such that conventional structured data access techniques can be utilized over unstructured data objects.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong-Thao Cao whose telephone number is (571) 272-2735. The examiner can normally be reached on 8:30 AM - 5:00 PM (Mon - Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PTC

May 24, 2006


Primary Examiner
Art Unit 2167